

Thiania suboppressa Strand 1907 (Araneae: Salticidae), new to Japanese fauna

Tatsumi Suguro

Graduate School of Life and Environmental Sciences, University of Tsukuba,
1-1-1 Tennodai, Tsukuba-shi, Ibaraki, 305-8572 Japan
E-mail: t.s.schlegelii@gmail.com

Abstract — A salticid spider species, *Thiania suboppressa* Strand 1907 is newly recorded from Japan. The genus *Thiania* is new to the Japanese fauna. This species is easily distinguishable from the other Japanese salticid spiders by having: flattened body with lustrous markings; male palpal bulb with a circular plate forming the base of embolus; epigynum with two large depressions divided by median ridge.

Key words — Taxonomy, Salticidae, *Thiania suboppressa*, new records, Ryukyu Islands

Thiania Koch C. L. 1846 is a salticid spider genus, known as “fighting spiders” because the males are often seen confronting one another (Murphy & Murphy 2000; Li et al. 2002). Up to the present, a total of 18 species are described from Oriental region under this genus (Prószyński 2012). After examining the materials obtained from Amami-Ōshima Island, Kagoshima Pref. and Okinawa Island, Okinawa Pref., Japan, I recognized the occurrence of *Thiania suboppressa* Strand 1907, that has been recorded only from China (Strand 1907; Wesołowska 1981; Peng et al. 1993; Song et al. 1999) and Vietnam (Žabka 1985). Here, I present the morphological characteristics of this species using the Japanese specimens.

The voucher specimens are deposited in the collection of the Department of Zoology, National Museum of Nature and Science, Tokyo.

The following abbreviations are used: ALE, anterior lateral eye; AME, anterior median eye; PLE, posterior lateral eye; PME, posterior median eye; RTA, retrolateral tibial apophysis.

Genus *Thiania* Koch C. L. 1846
[Japanese name: Masurao-haetorigumo zoku]

Thiania Koch 1846, p. 171; Simon 1901, p. 588; Žabka 1985, p. 451; Barrion & Litsinger 1995, p. 86; Murphy & Murphy 2000, p. 317; Prószyński 2009, p. 166; Sebastian & Peter 2009, p. 312. Type species: *Thiania pulcherrima* Koch C. L. 1846, from Sulawesi.

Diagnosis. Body entirely flattened and with some lustrous markings made of iridescent scalelike hairs. Carapace rather rectangular. Abdomen rather slender. Leg I often elongated in male. Male palp thick and showing following characters: meandering seminal duct beneath lateral surface

of genital bulb; sclerotized circular plate forming the base of embolus on the upper part of genital bulb; single large RTA. Epigynum large and showing following characters: two depressions divided by median ridge; slit-like copulatory openings; internal canals often with accessory glands; oval or pear-shaped spermathecae.

Distribution. Japan, Borneo, China, India, Indonesia, Malaysia, Myanmar, New Guinea, The Philippines, Singapore, Sri Lanka and Vietnam.

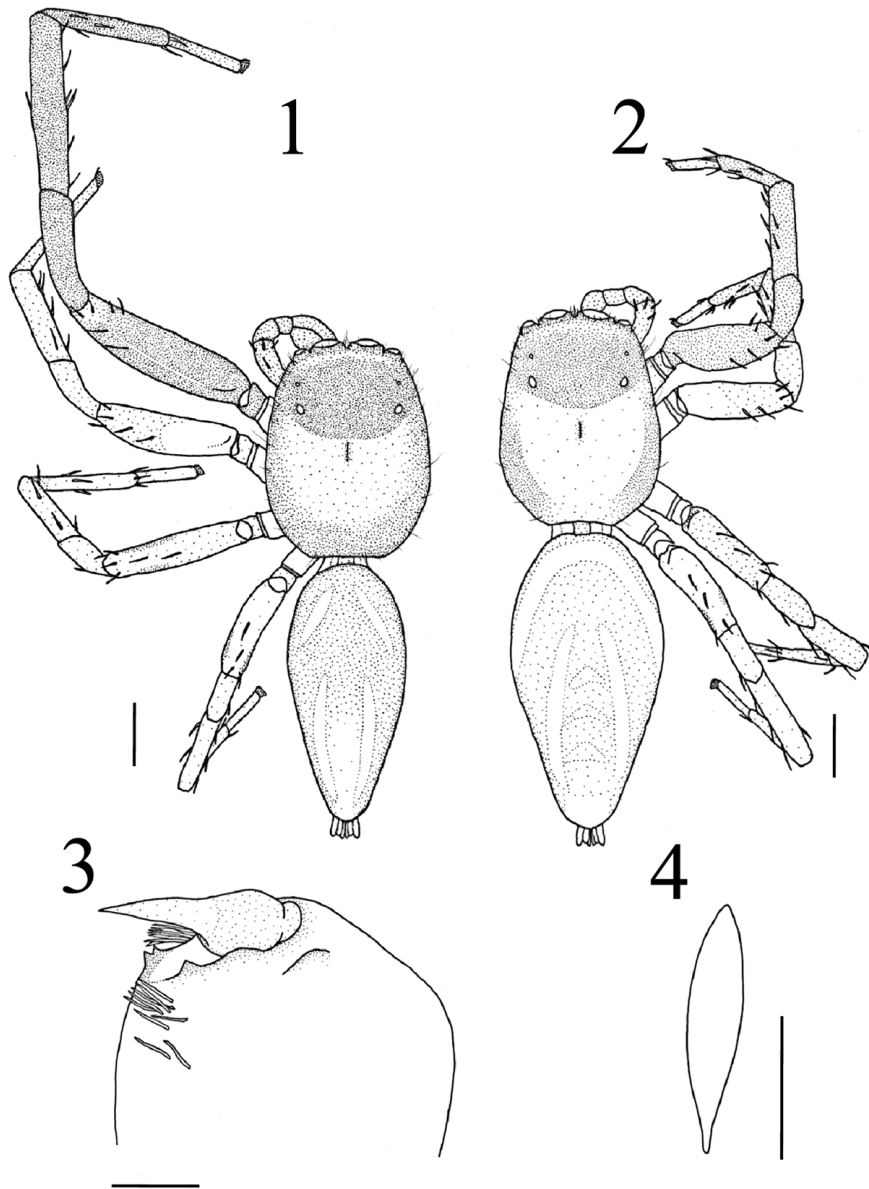
Thiania suboppressa Strand 1907
[Japanese name: Masurao-haetori]
(Figs. 1–8)

Thiania suboppressa Strand 1907, p. 569 [syntypes from China: Swatow, deposited in Staatliches Museum für Naturkunde Stuttgart, destroyed during World War II]; Peng et al. 1993, p. 240, f. 855–861; Song et al. 1999, p. 562, f. 320P, 322C, 330F.

Thiania suboppressa: Wesołowska 1981, p. 50, f. 15–18; Prószyński 1984, p. 145; Žabka 1985, p. 453, f. 628–631.

Specimens examined. All the specimens were collected in Japan. Okinawa Pref.: Okinawa Is.: 1 ♂, Ishikawa, Uruma-shi, 10-VII-2010, T. Suguro leg. (NSMT-Ar 9882); 1 ♀, same data (NSMT-Ar 9883); 2 ♂ 1 ♀, same data; 1 ♀, Genka, Nago-shi, 12-VII-2010, T. Suguro leg.; 1 ♀, Oppadake Mt., Nakijin-son, 21-IV-2010, H. Yoshitake leg.; 1 ♀, Sakiyama, Nakijin-son, 23-IV-2010, H. Yoshitake leg. Kagoshima Pref.: Amami-Ōshima Is.: 1 ♀, Ongachi, Yamato-son, 12-VI-2005, Y. G. Baba leg.; 1 ♂, Kawauchi, Sumiyō-chō, Amami-shi, 15-IX-2011, T. Suguro leg.

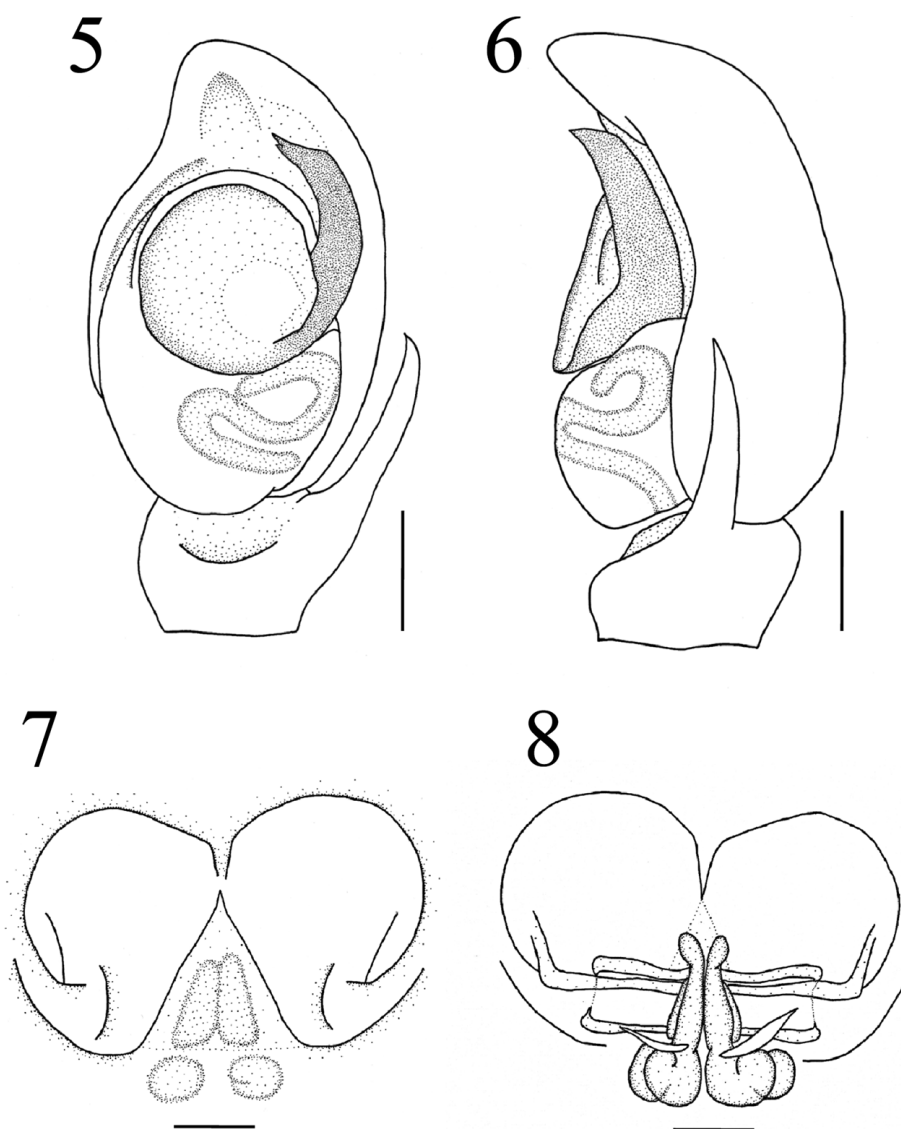
Description. Based on 1 ♂ (NSMT-Ar 9882) and 1 ♀ (NSMT-Ar 9883) from Okinawa Is., Japan (Figs. 1–2). Measurements (in mm except for proportions of two values;



Figs. 1–4. *Thiania suboppressa* Strand 1907 from Okinawa Is., NSMT-Ar 9882 (1, 4) and NSMT-Ar 9883 (2–3). 1. Male, dorsal view; 2. Female, dorsal view; 3. Female chelicera, ventral view; 4. Male scalelike hair. Scales=1.0 mm (1–2), 0.2 mm (3), 0.05 mm (4).

measurements in parenthesis indicate the range for the specimens examined). Body length ♂ 6.70 (5.55–7.65), ♀ 6.95 (5.90–8.25); carapace length ♂ 3.20 (2.65–3.65), ♀ 3.00 (2.85–3.60); width ♂ 2.53 (2.10–2.90), ♀ 2.47 (2.23–2.93); height ♂ 1.10 (0.90–1.25), ♀ 1.00 (0.88–1.15); abdomen length ♂ 3.50 (2.90–4.00), ♀ 3.95 (3.05–4.65); width ♂ 1.80 (1.63–2.00), ♀ 2.93 (1.73–2.97). Eye field: width of eye row I ♂ 1.95 (1.65–2.15), ♀ 1.90 (1.70–2.08); width of eye row III ♂ 1.83 (1.53–2.00), ♀ 1.75 (1.63–1.98); length of eye row ♂ 1.15 (1.00–1.30), ♀ 1.13 (1.03–1.28); half length of eye row ♂ 0.63 (0.60–0.68), ♀ 0.60 (0.55–0.68); width of eye row I/width of eye row III ♂ 1.07 (1.07–1.10), ♀ 1.09 (1.04–1.09); AME diameter ♂ 0.57 (0.48–0.63), ♀ 0.57 (0.50–0.65); ALE/AME ♂ 0.56 (0.55–0.59), ♀ 0.53 (0.53–0.58); ALE/PLE ♂ 1.27 (1.21–1.31), ♀ 1.29 (1.19–

1.36); PME/PLE ♂ 0.27 (0.25–0.31), ♀ 0.25 (0.22–0.27). Carapace broad and flattened, height/width ♂ 0.43 (0.39–0.43), ♀ 0.41 (0.39–0.43), with distinct longitudinal fovea. Chelicera short, with two promarginal and one retromarginal teeth, and tufts of thick hairs on both sides of fang furrow (Fig. 3). Length of legs [femur+patella+tibia+metatarsus+tarsus = total]: I ♂ 2.45+1.65+2.55+2.03+1.05 = 9.73, ♀ 1.70+1.15+1.38+1.15+0.70 = 6.08; II ♂ 1.90+1.18+1.25+1.38+0.73 = 6.43, ♀ 1.65+1.08+1.00+1.05+0.60 = 5.38; III ♂ 1.90+1.13+1.13+1.55+0.70 = 6.40, ♀ 1.65+1.00+0.95+1.28+0.63 = 5.50; IV ♂ 1.75+0.98+1.38+1.48+0.65 = 6.23, ♀ 1.60+0.90+1.25+1.28+0.65 = 5.68. Male leg I extremely long, length of male leg I/carapace width 3.84 whereas female leg I/carapace width 2.78. Spination of legs



Figs. 5–8. *Thiania suboppressa* Strand 1907 from Okinawa Is., NSMT-Ar 9882 (5–6) and NSMT-Ar 9883 (7–8). 5. Male palp, ventral view; 6. Same, retrolateral view; 7. Epigynum; 8. Female genitalia, dorsal view. Scales = 0.2 mm.

Table 1. Spination of legs of *Thiania suboppressa* Strand 1907 from Okinawa Is., NSMT-Ar 9882 (male) and NSMT-Ar 9883 (female); dorsal / ventral; none = no spines, r = retrolateral, p = prolateral.

Leg	Femur	Patella	Tibia	Metatarsus	
I	♂	1-1,2p-2/none	1r/none	1p,1r-1p,1r-1p,1r-0/2-2-0-2	1p,1r-0-1p,1r/0-2-2
	♀	1-1-2,2p/none	1r/none	1p,1r-1p,1r-1p,1r-0/2-2-0-2	1p,1r-0-1p,1r/0-2-2
II	♂	1-1-3/none	1r/none	1p,1r-1p,1r-1p-0/2-2-0-2	1p,1r-0-1p,1r/0-2-2
	♀	1-1-3/none	1r/none	1p,1r-1p,1r-1p-0/2-2-0-2	1p,1r-0-1p,1r/0-2-2
III	♂	1-1-3/none	1r/none	1p,1r-1p,1r-1p,1r-0/1-0-0-2	1p,1r-1p,1r/2-3
	♀	1-1-3/none	1r/none	1p,1r-1r-1p,1r-0/1-0-0-2	1p,1r-1p,1r/1-2
IV	♂	1-1-2/none	1r/none	1p,1r-1r-1p,1r-0/0-0-0-2	1r-1p,1r/0-0
	♀	1-1-2/none	1r/none	1r-1r-1p,1r-0/0-0-0-2	0-1p,1r/1-0

as shown in Table 1. Abdomen slender.

Male palp (Figs. 5–6). Mostly brown. Genital bulb with meandering seminal duct on lateral surface and strongly sclerotized circular plate on upper part. Embolus thick and dark colored, on circular plate. RTA slender, slightly bending ventrally. Cymbium covered with brown hairs, tip light

colored and covered with white hairs.

Female genitalia (Figs. 7–8). Epigynum large, its width/carapace width 0.39, and with two depressions divided by sclerotized triangular part. Copulatory openings slit-like. Internal canals narrow, long and well sclerotized. Spermathecae small.

Coloration and markings. Male. Carapace: mostly blackish brown covered with sparse black hairs; top of thoracic part dark reddish brown; with iridescent scalelike hairs (Fig. 4) behind anterior eye row and around top of thoracic part, black setae below anterior eye row and on margin of carapace, and white setae below anterior eye row. Surroundings of eyes black. Clypeus dark brown with black setae and white long hairs. Chelicera blackish brown with white hairs. Labium and maxilla dark brown with light margin. Sternum bright brown with dark margin. Abdomen: dorsum grayish brown covered with sparse black hairs, with two pairs of yellowish white longitudinal markings covered by iridescent scalelike hairs, caudal end yellowish white; venter yellowish brown except grayish brown middle part, covered with grayish brown and translucent hairs. Spinnerets greyish brown. Leg I blackish brown except rather paler tarsus. Leg II: proximal half of femur yellowish white, distal half, patella and tibia dark brown, metatarsus and tarsus bright brown. Legs III and IV: similar to leg II, but rather paler. Each leg with sparse iridescent scalelike hairs on patella, tibia and distal end and light colored part of femur.

Female generally similar to male, but showing paler, less contrasty coloration and somewhat different abdominal markings: crescent marking on anterior margin, a pair of longitudinal markings and three chevrons. Arrangement pattern of iridescent scalelike hairs same as male.

The scalelike hairs often lost in alcohol.

Distribution. Japan (new record; Amami-Ōshima island and Okinawa island), China and Vietnam.

Remarks. This species can be easily distinguished from other Japanese species by the medium or large-sized flattened body with lustrous markings. Also genital morphology is characteristic: male palp with a sclerotized circular plate forming the base of embolus; epigynum with two large depressions and sclerotized triangular part.

No significant differences are found in both coloration and genital morphology between present specimens from Japan and Chinese (Song et al. 1999) or Vietnamese populations (Żabka 1985).

Acknowledgments

I wish to express my heartfelt thanks to Dr. Yuki G. Baba and Dr. Hiraku Yoshitake, National Institute for Agro-Environmental Sciences for offering specimens used in this paper. My thanks are also due to Dr. Akio Tanikawa, University of Tokyo, for revising the manuscript of this paper.

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Received April 22, 2012 / Accepted June 20, 2012